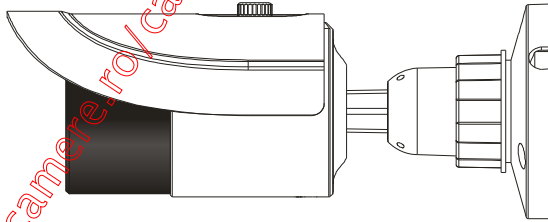


2 Mega Pixel

Water-Proof IR Network Camera

User Manual



Please read this instruction carefully for correct use of the product

Before use this product

- Before operation, we strongly advise users to read this manual and keep it properly for using later.
- This is product instructions not quality warranty. We may reserve the rights of amending the typographical errors, inconsistencies with the latest version, software upgrades and product improvements, interpretation and modification. These changes will be published in the latest version without special notification.
- When this product is in use, the relevant contents of Microsoft, Apple and Google will be involved in. The pictures and screenshots in this manual are only used to explain the usage of our product. The ownerships of trademarks, logos and other intellectual properties related to Microsoft, Apple and Google belong to the above-mentioned companies.

<http://www.e-camere.ro/camere-supraveghere-ip-prose-p27316>

Table of Contents

1	Introduction.....	1
1.1	Summarization	1
1.2	Check Package Content	1
1.3	Connection	1
2	Installation	3
2.1	Install IP-CAM to Ethernet Network	3
2.2	Install CMS	3
3	IE Remote Access.....	5
3.1	LAN	5
3.1.1	Access through IP-Tool	5
3.1.2	Directly Access through IE.....	6
3.2	WAN	8
4	Remote Preview	9
4.1	The Remote Preview Interface	9
4.2	Record Playback	9
4.3	Right-click Function	10
4.4	Snap Pictures	10
5	Remote Live Surveillance.....	12
5.1	System Configuration	12
5.1.1	Basic Information	12
5.1.2	Date & Time Configuration.....	13
5.2	Video Configuration	13
5.2.1	Camera Configuration	13
5.2.2	Video Stream	14
5.2.3	Time Stamp	14
5.2.4	Video Mask	15
5.3	Alarm Configuration.....	15
5.3.1	Motion Detection Area	15
5.3.2	Motion Detection Trigger.....	16
5.3.3	Motion Detection Schedule	17
5.4	Network Configuration	17
5.4.1	Port	17
5.4.2	Wired.....	18
5.4.3	NET Traversal Configuration.....	18
5.4.4	Server Configuration.....	19
5.4.5	IP Notify	20
5.4.6	DDNS Configuration.....	20
5.4.7	RTSP	22
5.4.8	UPNP	23
5.4.9	Mail Setting	24
5.4.10	FTP	24
5.5	Advanced Configuration.....	25

5.5.1	User Configuration	25
5.5.2	Onvif Configuration	27
5.5.3	Security Configuration	27
5.5.4	Configure Backup & Restore.....	28
5.5.5	Reboot Device.....	28
5.5.6	Upgrade	29
6	Mobile Surveillance	30
6.1	Network Configuration	30
6.2	By Phones with iPhone OS	30
6.3	By Phones with Android OS	40
7	Use method for IP-TOOL.....	46
8	Q & A	49
9	Specification	51

1 Introduction

1.1 Summarization

This IP-CAMERA (short for IP-CAM) is designed for high performance CCTV solutions. It adopts state of the art video processing chips. It utilizes most advanced technologies, such as video encoding and decoding technology, complies with the TCP/IP protocol, SoC, etc to ensure this system more stable and reliable. This unit consists of two parts: the IP-CAM device and central management software (short for CMS). The CMS centralizes all devices together via internet or LAN and establishes a sound surveillance system to realize unified management and remote operation to all devices in one network.

This product is widely used in banks, telecommunication systems, electricity power departments, law systems, factories, storehouses, uptowns, etc. In addition, it is also an ideal choice for surveillance sites with middle or high risks.

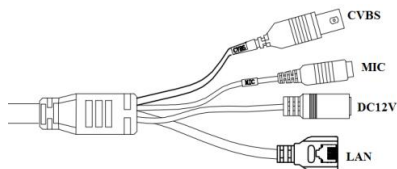
1.2 Check Package Content

The pictures below are only for reference. Please make the object as the standard.

IP-CAMERA	Quick Start Guide	CD
		

Accessories	Description
IP-CAMERA	The device without Lens
Quick Start Guide	The Brief instructions of the product
CD	CD-ROM with software and manual

1.3 Connection



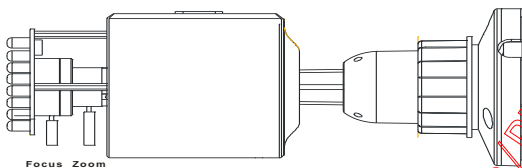
CVBS: connect to monitor

MIC: connect to MIC

DC12V: connect to power supply

LAN: network port (some models support PoE power supply)

Some models of this series support internal focusing. The steps are as follows:



Step 1: Remove the sun shade and lens case from the device as shown above.

Step 2: Loosen the screws of the lens for focusing. Then rotate the lens left or right to adjust the focus.

Focus: Rotate left or right to adjust definition of the image.

Zoom: Rotate left or right to zoom in or out the image.

2 Installation

2.1 Install IP-CAM to Ethernet Network

The connection of digital video server is show below.

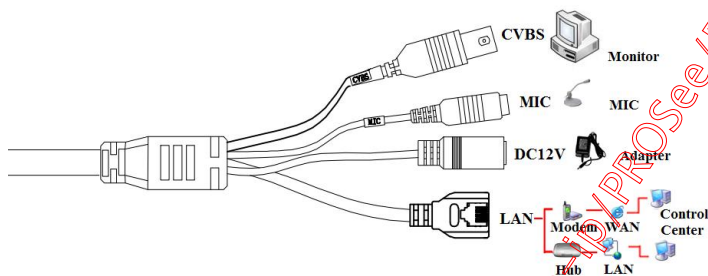


Figure 2-1 Connection

Please connect the PC and IP-CAMERA in accordance with the above picture.

The connection steps are shown as below:

Step 1: Connect the monitor, microphone and network to the device.

Step 2: Connect the power supply.

Step 3: Install the device.

2.2 Install CMS

After the CDD IP-CAM connected to the Ethernet, user can remote monitoring and managing the device by using client software or IE browser. This chapter is the client software, which is the quick install guide of the CMS, the operation and monitor setting details please refers to CMS user manual in CD.

Note: Before to install control center software in user's computer, please make sure all anti-virus software in the computer closed so that CMS can install correctly.

● System requirement

Supported Operating System:

Operating system	Comments
Windows XP	Windows XP SP2 or most updated patch; Direct 9.0c or above
Windows Vista	Windows Vista; Direct 10. c
Window 7	Window 7 Ultimate
Windows 2003	Windows 2003 serve or Directx 9.0c or above
Windows 2000	Windows 2000 SP4 or Directx 9.0c or above

● Computer hardware requirement

Please make sure the software running well and the computer is compatible :

Recommended PC Specification – 4 channels

<i>Item</i>	<i>Specification</i>
CPU	Intel Pentium 3.0 GHz or AMD 3000+
Memory	1GB
HDD	160GB

Recommended PC Specification -9 channels:

<i>Item</i>	<i>Specification</i>
CPU	Intel Core 2 Duo 1.8 GHz or AMD Dual core 3800+
Memory	1GB
HDD	250GB

Recommended PC Specification -16 channels:

<i>Item</i>	<i>Specification</i>
CPU	Intel Core 2 Duo 2.2 GHz or AMD Dual core 3800+
Memory	2GB
HDD	250GB

**Notice:**

- The AMD chip hyper-3800+ and X64 series are not tested.
- For real-time view at CIF, max 25 channels can be played concurrently.
- For real-time view at D1, max 6 channels can be played concurrently.

Installation Process

It is recommended to disable the anti-virus software before the installation of CMS.

1. Run the 'Setup.exe' from software CD. Then install CMS according to the prompts.
2. After you install this software, double click it to run if necessary.
3. Find the user manual of the control center system from programs. You can operate this software according to the introduction of this user manual.

If you just want to user IP-tool, there is no necessary to install CMS software. You can open the CD and find the IP-tool software and double click it to install.

3 IE Remote Access


IP-Cam can be connected through LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

3.1 LAN

In LAN, there are two ways to access IP-Cam: 1. Access through IP-Tool; 2. Directly access through IE browser.

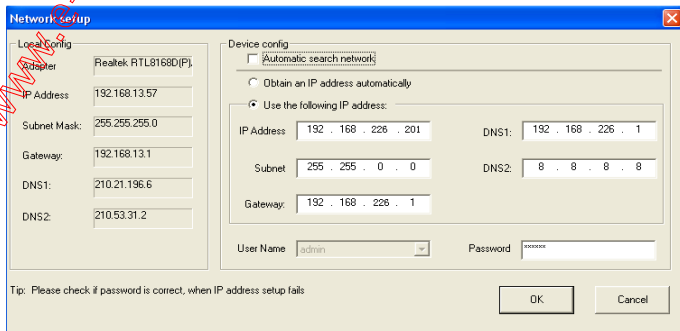
3.1.1 Access through IP-Tool

Step 1: Make sure the PC and IP-Cam are connected to the LAN and the IP-Tool is installed in the PC from the CD.

Step 2: Use IP-Tool to modify the network of IP-Cam. Then, double click the  icon on the desktop to run this software as shown below:



After starting IP-Tool, clicking the IP-Cam name in the list can display the detail information of IP-Cam. If you cannot confirm which one is yours, please shut off the electricity of the IP-Cam and then power on it. When shutting off the power, the device information will disappear. When powering on, the device information will emerge. Well, this device is the used device. Right click the device information and select "network setup". Then the network setup window will pop up as shown below:



For example, the network segment of this computer is 192.168.13.x under the local config table. So, please modify the IP address, Gateway of IP-Cam which must be in the same network segment with the computer. Modifying the network, you have to input the password and click “OK” button to save the setting.

Note: The default user name is: admin. The default password is: 123456.

The new IP address of this device will display as follows after modification.

Step 3: Use the IP-Tool to login the IP-Cam.

Right-click the IP address and select “browse with IE” or double click the information of this device. The IE browser will auto download the Active X control. If the IE browser cannot download the Active X control, please refer to Q4 of Chapter 9. After the completion of the installation of the Active X control, a login window will pop up.

Input User name and password and then click “OK” button to login.

Note: You can also use the modified IP address of the IP-Cam. Input the IP address in the IE browser bar and then click “Enter” to access IP-Cam. The default user name is admin. The default password is 123456.

3.1.2 Directly Access through IE

The default network settings are as shown below:

IP address: **192.168.226.201**

Subnet Mask: **255.255.255.0**

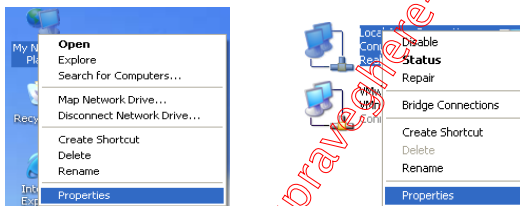
Gateway: **192.168.226.1**

HTTP: **80**

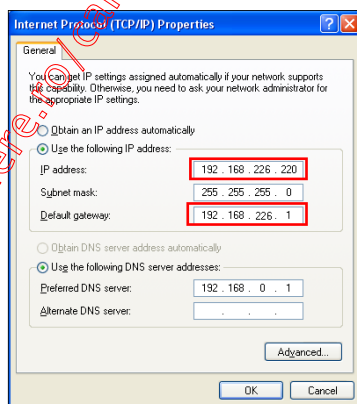
Data port: **9008**

The first time you used the IP-CAM, you should connect the device with the above default settings. Here take the Windows XP OS for example to introduce the setting steps.

Step 1: Manual setup the IP address of the PC, the network segment should be as same as the default settings of IP-CAM. Right click “My Network Places” icon on the desktop → select “properties” as shown in the left figure. Right click “Local Area Connection” at the popup window and then select “property” as shown in the right figure.



Select “Internet Protocol (TCP/IP)” in the “General” tabs, click “properties” in the next window and then manual input network address information of the PC in the following popup window.



Step 2: Open the IE Browser, input the default address of IP-CAM and confirm. This will take you to the Active X control downloading interface. If IE browser can't download Active X control, please refer to Q4 of chapter 9.

Step 3: After downloading Active X control, the login dialog box will pop up.

Step 4: Input user name and password in the login dialog box and click “OK” button to enter into the live interface. You can manage and setup the IP-CAM in the IE client, such as changing IP address, upgrading the software., etc.

3.2 WAN

Access through router or virtual server

Step1: Make sure the device is well connected in LAN. Then enter into System Configuration→Network configuration→Basic configuration to setup the port number as shown in Fig 3-1:

Step 2: Enter into System Configuration→Network configuration→IP configuration interface to change IP address as shown in Fig 3-2:

Notice: The steps above should be saved after the change of the port and IP address.

Network basic config

HTTP Port: 80

Data Port: 9008

Fig 3-1 Port setup

IP Config

☐ Obtain an IP address automatically

☒ Use the following IP address

IP Address: 192.168.6.6

Subnet Mask: 255.255.255.0

Gateway: 192.168.6.1

Preferred DNS server: 210.21.53.2

Alternate DNS server: 210.21.196.6

Fig 3-2 IP setup

Step 3: Enter into the router’s management interface through IE browser and forward the IP address and port of IP-CAM in the “virtual server”. The name depends on the router. Please refer to Fig 3-3:

Port Range					
Application	Start	End	Protocol	IP Address	Enable
1	9008	9008	Both	192.168.6.6	<input checked="" type="checkbox"/>
2	80	81	Both	192.168.6.6	<input checked="" type="checkbox"/>
3	10000	10001	Both	192.168.6.166	<input type="checkbox"/>
4	21000	21001	Both	192.168.6.156	<input type="checkbox"/>
5	7777	7778	Both	192.168.6.206	<input type="checkbox"/>
6	1029	1030	Both	192.168.6.207	<input type="checkbox"/>

Fig 3-3 Router setup

Step 4: Open the IE browser and input its WAN IP and http port to access. The following steps are as same as “Step 2, 3 and 4” of Chapter 3.1.2 in LAN.

4 Remote Preview

4.1 The Remote Preview Interface

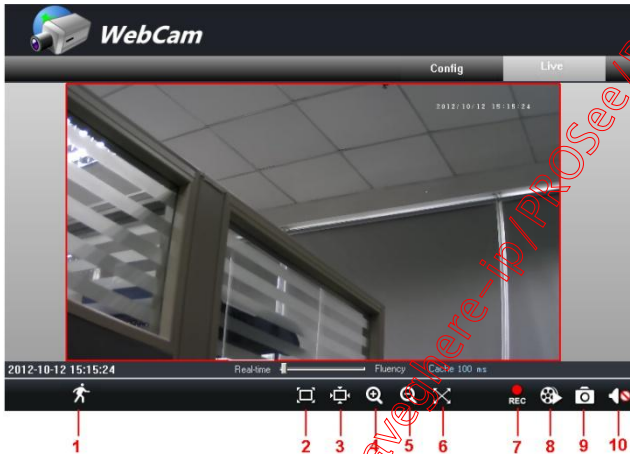







Fig 4-1 Remote Preview

1	People icon	2	Fix size	3	Zoom in
4	Zoom in	5	Zoom out	6	Full screen
7	Start record	8	Playback	9	Snap
10	Enable audio				

- When motion detection alarm is triggered, the people icon turns red.
- Click  icon to zoom in the preview image to suitable size. Drag the cursor on the enlarged image to view suitable preview area. Click  icon to zoom out the enlarged image. Click  icon to full-screen the live image.
- Clicking  icon will appear a save path window and the record file can save on your PC.

Note: On Window 7 and Window Vista, user can not record or snap pictures until UAC function is disabled. Please refer to following steps: Start—Control panel—User accounts—Change user account control settings in which user needs to drag the scale to Always notify end and then click “OK” button to save.

4.2 Record Playback

Click  icon and refer to Fig 4-2:

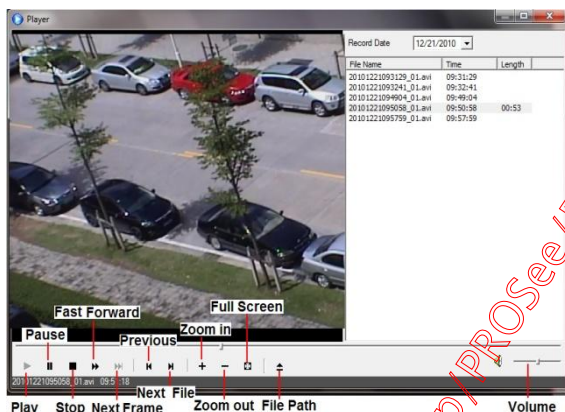


Fig 4-2 record playback interface

After selecting the record date, the record files will be displayed in the record file list box. User can double click a certain record file to playback or check a certain file. Then click Play button to do playback.

4.3 Right-click Function

Clicking right mouse will appear a pull-down list as below:

Stream: There are two options.

Turn off the live: Click this item will close present live preview.

Enable audio: Enable remote audio transmission. Users can hear the audio from the IP-CAM.

Full screen: The live preview picture will full-screen display. Double click or click right mouse to return to the previous interface.

Online user: Display user's list connect to the device.

System information: Display the device information: device name, firmware version, software build date, kernel version and hardware version.

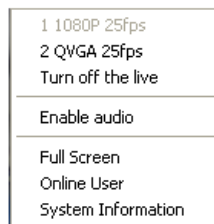



Fig 4-3 Right key sub-menu

4.4 Snap Pictures

1. Select the picture number, and then click "Snap"  icon as shown in the Fig 4-4.
2. User can snap multiple pictures. Select the picture number from Frame pull down list box, such as 3, and check "Title" and "Time" to show capture title and time on the snap pictures simultaneously. Refer to Fig 4-5:
3. Click "Browse" to set saving path; Click "Save" to save pictures to HDD on the computer; Click "Printer setup" to set the printer and print the snap pictures; drag the

scroll bar to view all snapped pictures.

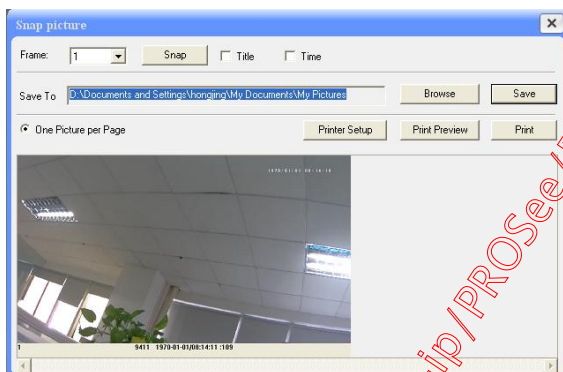


Fig 4-4 Single Snap

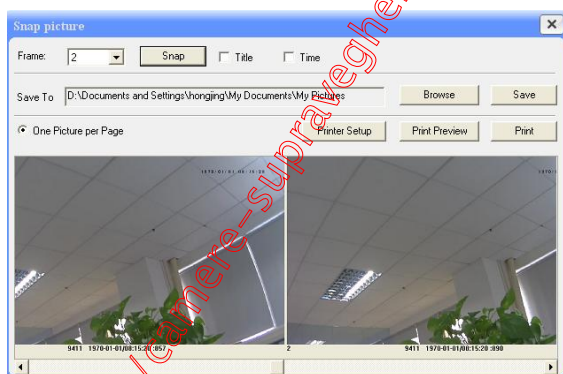


Fig 4-5 Multi-picture Snap

5 Remote Live Surveillance

Functions of remote configurations include: System Configuration, Video Configuration, Alarm Configuration, Network Configuration and Advanced Configuration. User should firstly select the menu on the left, and then setup the relative parameters. When a user setup parameters of a certain device, other users can not setup this device.

5.1 System Configuration

The “System configuration” includes two submenus: Basic Information and Date & Time.

5.1.1 Basic Information

In the “Basic Information interface, user can setup the device name and also can check the relative information of the server

Setting steps:

1. Clicking the "Config" icon will appear the menu list.
2. Clicking the “Basic Information "will pop up a window as shown in Fig 5-1:
3. Input the name of the device in the "Device name" text box.
4. Press the "Save" button to save the settings.

System Information	
Software Version	3.3.1
Software Build Date	2013-5-22(YYYY-MM-DD)
Kernel Version	2.6.32
Hardware Version	1.2
MAC	00:1D:8E:34:A8:B4
Maximum number of user	4
Device name	name

Fig 5-1 Basic Information Config

Please refer to the following table for parameters and instructions of server basic configuration.

Parameter	Meaning
Software version	The software of the device
Software build date	The software build date of the device
Kernel version	The kernel version of the device
Hardware version	The hardware version of the device
Mac Address	MAC address of device
Maximum number of user	Support max 4 users to access
Device name	Name of the device.

5.1.2 Date & Time Configuration

Setting steps:

1. Enter into "System Configuration" → "Date & Time". Refer to Fig 5-2:
2. Select "Modify Time " to self-define time. Choose "Time Zone" according to user's location.
3. Set DST as required.
4. User can setup time by select the "Synchronize with NTP Server".
5. Press the "Save" button to save the settings.

Fig 5-2 Date & Time Config

5.2 Video Configuration

Camera Configuration includes four submenus: Camera Configuration, Video Stream, Time Stamp and Video Mask.

5.2.1 Camera Configuration

Setting steps:

1. Enter into "Video Configuration "→ "Camera" interface as shown in Fig 5-3:

Fig 5-3 Basic Configuration

2. User can adjust Brightness, Contrast, Hue and saturation of the picture.
3. Select white balance mode.
4. Sharpen, denoise , white balance, frequency, CVBS format and Day-Night mode are adjustable.
5. User also can enable the image mirror and image overturn function.
6. Press the "Save" button to save the settings.

5.2.2 Video Stream

1. Enter into "Video configuration"→ "Video Stream" to see a interface as shown in Fig 5-4:

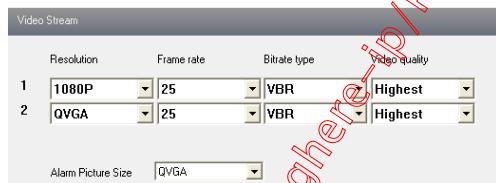


Fig 5-4 Video Stream

2. Select the resolution of the single frame image at the "Resolution" pull down list.
3. Select the quantity of video per second at the "Frame rate" pull down list.
4. Select the data stream type at the "Bit rate type" pull down list.
5. Set the video quality at the "Video quality" pull down list.
6. Select alarm picture size.
7. Press the "Save" button to save the settings.

5.2.3 Time Stamp

- Enter into "Video configuration"→"Time Stamp" to display the interface as shown in Fig 5-5:

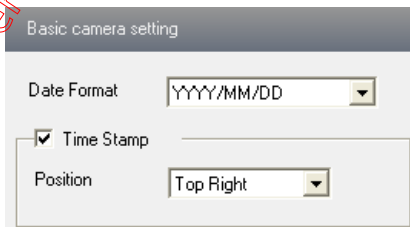


Fig 5-5 Time Stamp

1. Select Date Format to show in the live image.
2. Set time stamp. If time stamp is enabled, the live pictures with the time stamp will display. There are four positions of time stamp can be set. Top left, top right, bottom left and bottom right.
3. Press the "Save" button to save the settings.

5.2.4 Video Mask

You can set 4 mask area at most.

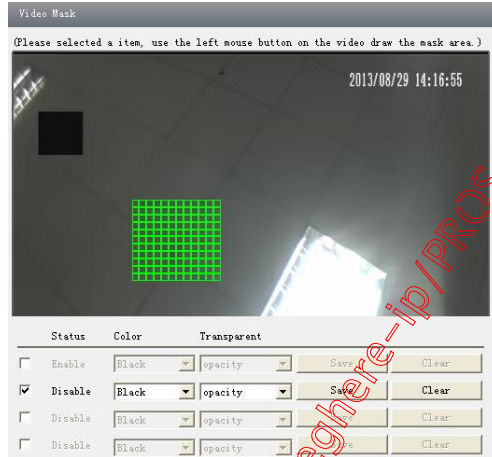


Fig 5-6 Video Mask

Enable the mask, select color and transparent of the mask area and then drag the mouse to set the mask area. This will take you see a gridding area. After that, click “Save” button to save the settings. Then you will see a mask area on the live image.

5.3 Alarm Configuration

Alarm configuration includes three submenus: Motion Detection Area, Motion Detection Trigger and Motion Detection Schedule.

5.3.1 Motion Detection Area

1. Enter into “Alarm configuration”→”Motion Detection Area” to see a interface shown as Fig 5-7:
2. Move the "Sensitivity" scroll bar to setup the motion trace sensitivity.
3. Check "Add", press the "Ctrl" button and move mouse to select the motion detection area; Select “Erase” and move the mouse to clear all motion detection area.
4. Press the “Save” button to save the settings.

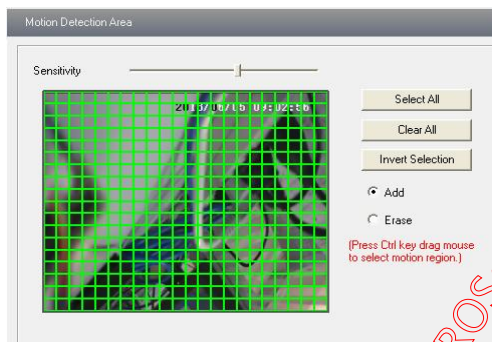


Fig 5-7 Motion Detection Area

5.3.2 Motion Detection Trigger

1. Enter into "Alarm Configuration" → "Motion Detection Trigger" to display a interface as shown in Fig 5-8:
2. Check "Enable alarm" check box. Then all functions under this interface will be activated.
4. Trigger Email: Check "Attach picture" and select email addresses in the "Receival email address" text box (Email address shall be set first in the Mail config interface). Then the triggered snap pictures will be sent into those address. User also can define the subject and content of the email.
5. Trigger FTP: Check "Uploading picture". Then the triggered snap pictures will be sent into FTP server address.

Note: Please refer to FTP configuration chapter for more details.

6. Press the "Save" button to save the settings.

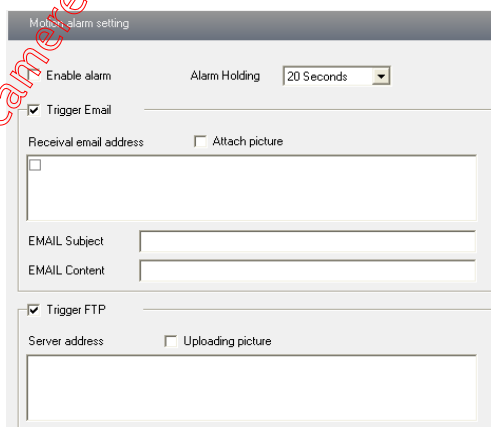


Fig 5-8 Motion Alarm Trigger

5.3.3 Motion Detection Schedule

Enter into "Alarm configuration"→ "Motion Detection schedule" interface as shown in Fig 5-9:

Week schedule

User could set the alarm time from Monday to Sunday for alarm everyday in one week.

Note: The lengthwise means one day of a week; the rank means 24 hours of a day. Click on the pane to set the alarm hours. Green means selected area. Blank means unselected area.

"Add": add the schedule for a special day.

"Erase": delete holiday schedule

Day schedule

User could set alarm time for alarm at a certain time of special day, such as holiday.

1. Select a date at the "Date" pull down list, press "Add" button to add that date to the list box on the right side and then move the scroll bar to set the schedule of that day.
2. Select a date in the list box on the right side, and press "Erase" to remove the schedule on that day.

Press the "Save" button to save the settings.

Note: Holiday schedule is prior to Week schedule.

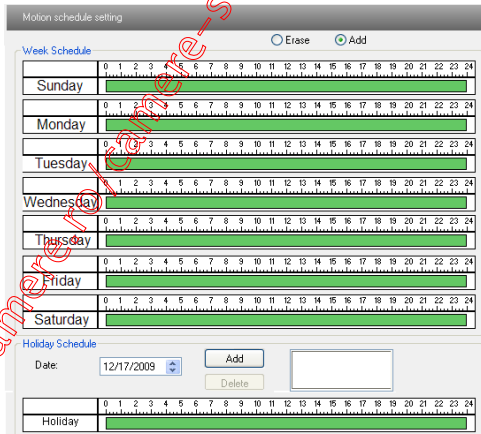


Fig 5-9 Motion Detection Schedule

5.4 Network Configuration

Network configuration includes ten submenus: Port, Wired, NET traversal Config, Server Configuration, IP Notify, DDNS Config, RTSP, UPNP, Mail Setting and FTP.

5.4.1 Port

1. Enter into "Network config"→"Port" to see the interface as shown in Fig 5-10:

Network basic config

HTTP Port	88
Data Port	9008
RTSP Port	554

Fig 5-10 Port Config

2. Input port number for IE access in the "HTTP Port" textbox.
3. Input the port number for audio & video transmission in the "Data Port" textbox.

5.4.2 Wired

Enter into "Network Configuration"→"Wired" to see a tab shown as Figure 5-11:

There are two options to setup IP: obtain an IP address automatically by DHCP protocol or manually input IP address and gateway by clicking "Use the following IP address".

IP Config

☐ Obtain an IP address automatically

☒ Use the following IP address

IP Address	192 . 168 . 6 . 23	Gateway	192 . 168 . 6 . 1
Subnet Mask	255 . 255 . 255 . 0	Alternate DNS server:	0 . 0 . 0 . 0
Preferred DNS server:	192 . 168 . 0 . 1		

PPPoE Config

☒ PPPoE

User Name: 075503704728@163.gd Password: [REDACTED]

Fig 5-11 Wired Config

PPPoE configuration:

If you want to access through PPPoE, you need to check "PPPoE" and enter username and password for dial-up internet

PPPOE: User needs to manual input the user name and password for dial-up internet.

Firstly, user needs to login IE clients, then enter into user name and password of PPPoE, save the setting and exit. Secondly, setup IP address change notice. Thirdly, connect with Modem, then the device will dial-up internet automatically.

6. Press the "Save" button to save the settings.

5.4.3 NET Traversal Configuration

In this interface, user can access to network without dynamic domain name and port forwarding by enabling NET transit.

1. Enter into "Network Configuration"→ "NET traversal Config". Refer to Fig 5-12:

Fig 5-12 Transit

2. Check “transit enable”. Then save the setting.
3. Input www.upnpicp.com in IE address; download and install Active X. Then a window shows up as Fig 5-13:

Fig 5-13 Login

4. Input the only device ID of the IP-CAM or user-defined name. And then input user name and password.

Note: The default user name and password are “admin” and “123456” respectively.

5.4.4 Server Configuration

Enter into “Network Configuration”→ “Server Config”. Please refer to Fig 5-14:

Fig 5-14 Server Configuration

1. Check "Do you want IP Camera to connect Server.
2. Check the IP address and port of the transfer media server in the ECMS/NVMS. Then enable the auto report in the ECMS/NVMS when adding a new device. Then input the remaining information of the device in the ECMS/NVMS. After that, the system will auto allot a device ID. Please check it in the ECMS/NVMS.
3. Input the above-mentioned server IP, server port and device ID in the responding boxes. Click "save" button to save the settings.

5.4.5 IP Notify

1. Enter into "Network Configuration" → "IP Notify" to see a tab as shown in Fig 5-15.
2. If the "Enable notifying change of IP" is selected, when the IP address of the device is changed, a new IP address will be sent to the appointed mailbox automatically; If "FTP" is selected, when the IP address of the device was changed, a new IP address will be sent to FTP server.

Fig 5-15 IP Notify Config

5.4.6 DDNS Configuration

1. Enter into "Network Configuration" → "DDNS Configuration" tab as shown in Fig 5-16:

Fig 5-16 DDNS Config

Note: The steps to band a domain name for video surveillance server are as follows. Firstly, register a user name and a password to log on the website of service supplier, and then apply for a domain name online for the server. After that, users can visit the server through inputting the domain name at IE terminal.

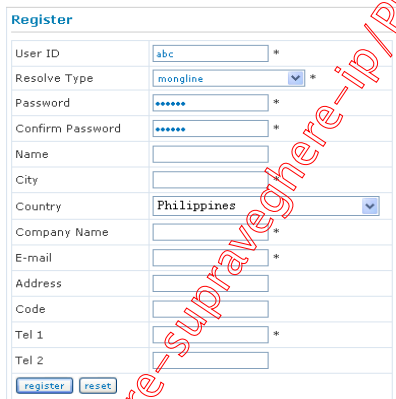
2. Press the "Save" button to save the settings.

Please refer to the following table for parameters and instructions of DDNS configuration.

Parameter	Meaning
DDNS server	Address of the website which provided by domain name supplier. The optional: www.dns2p.net , www.88ip.net , www.meibu.com , www.dyndns.com , www.no-ip.com , www.3322.org and mintdns type.
User name	Log in the website of domain name supplier
Password	Log in the website of domain name supplier

1. Apply the Domain Name (Take dns2p for example)

(1) Register in the Web




The register dialog box contains the following fields and controls:

- User ID: Text box with 'abc' entered, followed by an asterisk (*).
- Resolve Type: Dropdown menu with 'mongline' selected, followed by an asterisk (*).
- Password: Text box with six dots, followed by an asterisk (*).
- Confirm Password: Text box with six dots, followed by an asterisk (*).
- Name: Text box.
- City: Text box.
- Country: Dropdown menu with 'Philippines' selected.
- Company Name: Text box, followed by an asterisk (*).
- E-mail: Text box, followed by an asterisk (*).
- Address: Text box.
- Code: Text box.
- Tel 1: Text box, followed by an asterisk (*).
- Tel 2: Text box.
- Buttons: 'register' and 'reset'.

Register dialog box

Step 1: Fill in the blank of IE address with 'www.dns2p.com'.

Step 2: Click  to enter the website.

Step 3: Click "New User" in the right of homepage to register. For example: User ID is 'abc', and password is '123456'. The register dialog display as below:

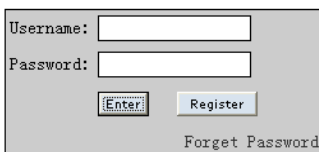
(2) Login

Step 1: Return to homepage after registering successfully.

Step 2: Click "Account Manager" on the right of homepage to login.

Step 3: Input the username and password with the information that you have registered.

Step 4: Click "Enter" key after filling in the textbox.



The log in dialog box contains the following fields and controls:

- Username: Text box.
- Password: Text box.
- Buttons: 'Enter' and 'Register'.
- Link: 'Forget Password'.

Log in

(3) Domain Setup

Step 1: Click "Domain Management" on the left to set the domain.



Domain setup

Step 2: Input the domain in the textbox. For example, you set 'IP-CAMERA' as the domain.

Step 3: Click "Submit" button, the system will pop up a dialog box to show that the domain is added successfully.

Note: Time of probationary period is one month. If user wants to use it continuatively after one month, please Step 4: click "Buy Now" in the right of homepage to pay for it.

2. Setup in the IP-CAMERA

(1) DOMAIN

Domain is set in '1. Apply the Domain Name'. According to the example above, the domain is 'WWW. IP-CAMERA.dns2p.com'.

(2) USER ID

Username of registered which is set in '(1) Register in the Web'. According to the example above, user ID is 'abc'.

(3) PASSWORD

Password is set in '(1) Register in the Web'. According to the example above, password is '123456'.

Note: If the connection fails, press the "INFO" button. Now the system will display: 'DDNS NONE'. Then you need to check network and information above and try again.

3. Application

Connect IP-CAMERA to the Network Client.

Step 1: After popping up the login interface, fill in "Server" textbox with '*.dns2p.com' to visit the Network Client of the IP-CAMERA. The domain set in '(3) Domain Setup'. According to the example above, fill in "Server" textbox with 'IP-CAMERA.dns2p.com'.

Step 2: Click "save" button to save the above setting.

5.4.7 RTSP

Enter into "Network Configuration" → "RTSP" interface as shown in Fig 5-17:

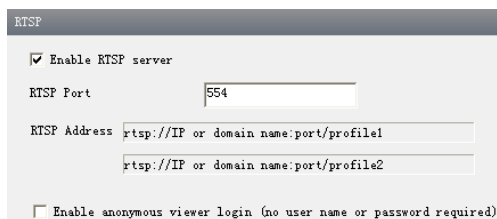


Fig 5-17 RTSP

1. Select “Enable RTSP server.
2. RTSP Port: Access Port of the streaming media. The default number is 554.
3. RTSP Address: The RTSP address you need to input in the media player.
4. Check “enable anonymous viewer login...”.

Application: This device supports VLC player. You should download the VLC player from the relevant website. Then choose “File” in the menu bar of the player and click “Open URL” order. Input the RTSP address in URL column and click “OK” button. Now, you can see the live image in the VLC player.

5.4.8 UPNP

Enter into “Network Configuration”→ “UPNP” interface as shown in Fig 5-18. Select “Enable UPNP” and then input friendly name.

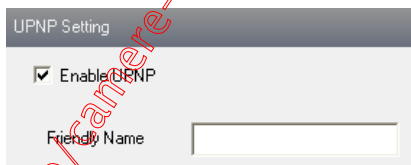
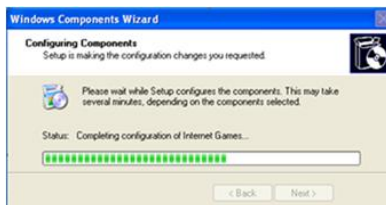


Fig 5-18 UPNP

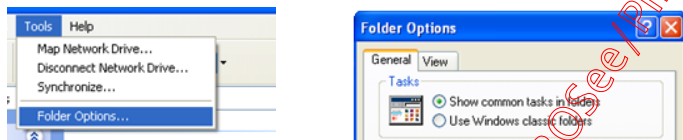
Enable UPNP

Double-click the “My Network Places” icon on the desktop in PC and select “Show icons for networked UPnP devices” in the “Network Tasks” list box. Then an information window will pop up. Click “YES” button to see a “Windows Components Wizard” dialog box pop up as shown below. Then press “Next” to continue. After finished the installation of configuring components, the UPnP icons will display. Users can double-click certain icon to connect the remote surveillance login interface through IE.



If “Show icons for networked UPnP devices” can’t display in the “Network Tasks” list box, please follow the below operation:

- Click “Tools”-- “Folder options”
- Check the “Show common tasks in folders” in the “Tasks” check box, UPnP icon will display.



5.4.9 Mail Setting

Enter into “Network Configuration” → “Mail Setting” interface. Please refer to Fig 5-19.



Fig 5-19 Mail Setting

1. From Email: sender’s e-mail address
2. User name and password: sender’s user name and password
3. Server address: SMTP name of sender
4. Select the secure connection type at the Secure Connection pull down list according to user’s actual needs
5. Receive email address list: add email address into the list
6. Receive email address: receiver’s e-mail address
7. After all parameters setup, user can click “Test your account settings”. If email sent successful, a “Test Successful” window will pop up, if not, users can try other email addresses or check the setting.

Notice: If user change the static IP into PPPoE and select mailbox, there will be an e-mail sent to users’ mail box for notify a new IP address.

5.4.10 FTP

Enter into Network Configuration → FTP interface; please refer to Fig 5-20:

Server name	Server address	Port...	User Name	Upload path:	

Add Modify Delete Test

Fig 5-20 FTP Setting

1. Add: Click Add button to input FTP server's server name, address, port number, user name, password, and upload path, click OK to confirm the setting. Refer to Fig 5-21:
2. Modify: User can click this button to change some information of the FTP server
3. Delete: Select certain FTP account; Click this button to delete this account
4. Test : Select certain FTP account; Click this button to test its valid or not.

Please refer to the following table for parameters and instructions of FTP configuration.

Fig 5-21 Add

Parameter	Meaning
Server name	The name of the FTP server
Server address	The address of the FTP server
Port	The port number of the FTP server
User name	The user name of the FTP server
Password	The password of the FTP server
Path	The save path for FTP files

5.5 Advanced Configuration

Advanced configuration includes five submenus: User Configuration, Onvif Configuration, Security Configuration, Configure Backup & Restore, Reboot and Upgrade.

5.5.1 User Configuration

Enter into "User Configuration" interface. Refer to Fig 5-22:

Add user:

1. Clicking "Add" button pops up "Add user" dialog box. Please refer to Fig 5-23:

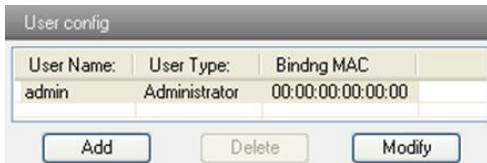


Fig 5-22 User Configuration

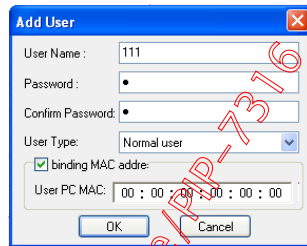


Fig 5-23 Add User

Note: After bind physical address to the IP-CAM, user can access the device on this PC in network only. If the MAC address was “00:00:00:00:00:00” which means it can be connected to any computers.

2. Input user name in "User Name" textbox (only letters).
3. Input characters in "Password" and "Confirm Password" textbox (letters or numbers).
4. Input the MAC address of the PC in "Binding MAC" address" textbox.
5. Click “OK” button and then the new added user will display in the user list.

Modify user:

1. Select the user which needs to modify password and physical address in the user configuration list box.
2. Clicking “Modify” button will pop up “Modify user” dialog box as shown below.

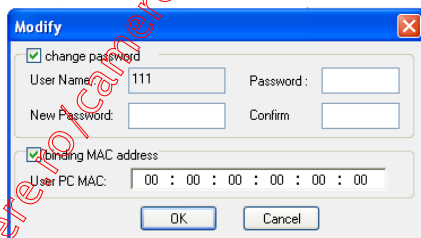


Fig 5-24 Modify User

3. Input original password of this user in the “password” text box.
4. Input new password in the “New password” and “Confirmation” text box.
5. Input computer’s physical address which is used to access the server in the “User PC MAC” text box.
6. Click “OK” button to modify user’s password and binding MAC address successfully.

Delete user:

1. Select the user which needs to delete in the user configuration list box.
2. Clicking “Delete” button will pop up a confirm dialog box. Then click “OK” to delete the user.

Note: The default super administrator cannot be deleted.

Parameter	Meaning
User Name	User name to operate the logon client end
User Type	Type of users, normal user, advanced user and super administrator
Binding MAC address	The MAC addresses of user access the server which should setup according to actual MAC address of server.
Password	Password to log in the client terminal
Confirm Password	Password to log in the client terminal

5.5.2 Onvif Configuration

This function is mainly used for connecting our device through other companies' monitoring platform software, such as, Hikvision, Axxon, Milestone., etc.

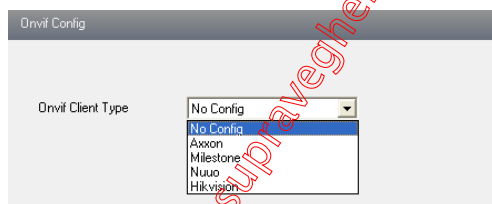


Fig 5-25 Onvif Config

5.5.3 Security Configuration

Enter into Advanced Configuration→Security Configuration to see a tab shown in Fig 5-26:

Check “Enable IP address” check box, select “Deny the following IP address”, input IP address in the IP address list box and click “Add” button. Then this IP address will display in the list box; the operation step of “Allow the following IP address” is the same with “Deny the following IP address”

Select the IP address which needs to be deleted from the IP address list box and click “delete” button to delete that IP address.

Check “Enable MAC address” check box, select “Deny the following IP address”, input MAC address in the MAC address list box and click “Add” button. Then this MAC address will display in the list box; the operation step of “Allow the following MAC address” is the same with “Deny the following IP address”.

4. Select the MAC address which needs to be deleted from the MAC address list box and click “delete” button to delete that MAC address.

5. Click "save" button to save the above setting.

The screenshot displays the 'Security Configuration' window. It is divided into two main sections: 'IP address filter setting' and 'MAC filter setting'. Both sections have a checked 'Enable' checkbox and two radio button options: 'Deny the following' (selected) and 'Allow the following'. Each section includes a large empty list box, 'Add' and 'Delete' buttons, and a text input field. The MAC filter section also features a MAC address format example: '00 : 00 : 00 : 00 : 00 : 00'.

Fig 5-26 Security Configuration

5.5.4 Configure Backup & Restore

Enter into Advanced configuration → Configure Backup & Restore Interface. to Fig 5-27.

● Import & Export Configuration:

User can import or export the setting information from PC or to device.

1. Click “Browse” to select save path for import or export information on PC.
2. User can import or export all setting information to PC, but those two settings “user configuration” and “network configuration” are exceptional.

The screenshot shows the 'Backup and Restore Configuration' window. It has three main sections: 'Import setting', 'Export setting', and 'Default setting'. The 'Import setting' section includes a 'Path' text box with a 'Browse' button, a dropdown menu set to 'All configuration exception for', and checkboxes for 'User Config' (checked) and 'Network Config' (unchecked). Below these are 'Import setting' and 'Export setting' buttons. The 'Export setting' section has an 'Export setting' button. The 'Default setting' section has a 'Load Default' button.

Fig 5-27 Backup and Restore Configuration

● Default Configuration

Click “Load default” button to restore all system settings to default status.

5.5.5 Reboot Device

Enter into Advanced configuration—Reboot device to see a interface as shown in Fig 5-28:

Click “Reboot device” button to reboot the device.

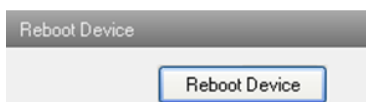


Fig 5-28 Reboot device interface

5.5.6 Upgrade

Enter into Advanced Configuration—Upgrade interface shown as Fig 5-29:

1. Click “Browse” button to select the save path of the upgrade file
2. Click “Upgrade server firmware” button to start upgrading the application program
3. The device will restart automatically
4. After you successfully update the software, click “OK” button to close IE and then re-open IE to connect IP-Cam.

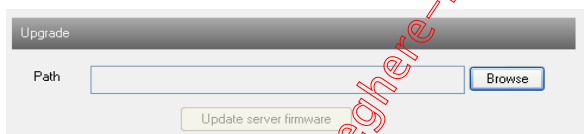


Fig 5-29 Upgrade

Notice: User can't disconnect to PC or close the IP-CAM during upgrade.

6 Mobile Surveillance

This IP-CAM supports mobile surveillance by phones with Windows mobile, iPhone, Android and Blackberry OS. Please check the operation system version of mobile before use; and connect the IP-CAM to Internet.

6.1 Network Configuration

- **Access device via LAN**

Step 1: Connect device via wireless router. Then checkmark DHCP both in router and device to automatically acquire IP address or enter the IP address manually.

Step 2: Use WIFI function in your mobile phone to connect the wireless router.

Note: Make sure your phone network and device network are in the same network segment on LAN.

Step 3: Add the IP address and port in the mobile phone surveillance client.

- **Access device via 3G network**

Step 1: Set the device network. Please enter Main Menu→Setup→Network tab.

► If you use PPPoE to connect device, please enable PPPoE and input username and password received from you ISP in network tab. Then click “Apply”. You can enter Main Menu→Information→Network tab to see the IP address. If you want to utilize dynamic domain name, please apply for a domain name in a DNS server supported by the device.

► If you have a static WAN IP address, please enter Main Menu→Setup→Network tab to input your IP address, gateway and port.

► If you use LAN IP address, please enter Main Menu→Setup→Network tab to input your IP address, gateway and port and then forward IP address and port number in virtual server setup of the router or virtual server(If you has enabled the UPnP function in both the device and router, you can skip this step). Port forwarding setting may be different in different routers and servers. Please refer to the router’s manual for details. After you forward your LAN IP address and port, please check the WAN IP address in the router or server.

Step 2: Add the WAN IP address or domain name in mobile phone surveillance client.

6.2 By Phones with iPhone OS

Install through iphone.

Step 1: Open App Store software as shown in the figure on the left.

Step2: Search “SuperLive Pro” and click “Free” button as shown in the figure on the right.



Step 3: Click “Install App” button as shown in the figure on the left.

Step 4: Input iTunes Store password and then click “OK”. The software will be installed automatically.



◆ Install Software through PC

Step 1: Install iTunes store in PC and then login.



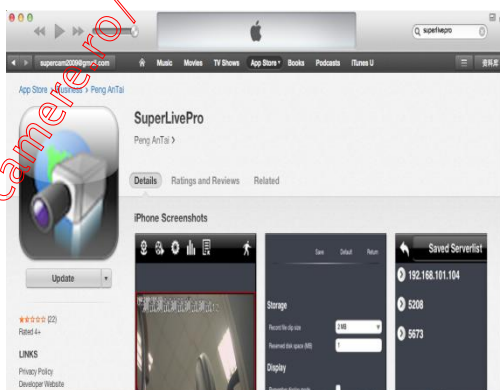
Step 2: Connect iPhone and PC.



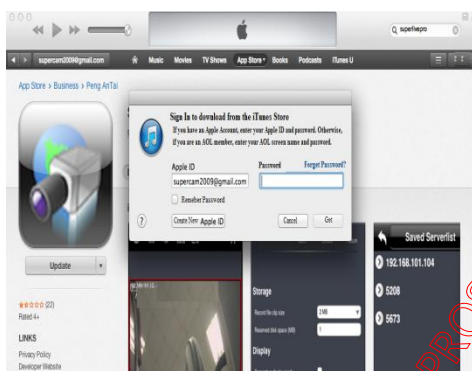
Step 3: Search “SuperLivePro” and select it.



Step 4: Click “Download” button



Step 5: Input username and password.

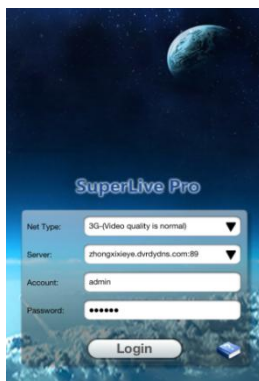


Step 6: Synchronously apply SuperLivePro software to iPhone/iPad.



◆ SuperLivePro Instruction

1. Login



Step 1: Choose network type. There are two network connection ways:

3G/3G +WIFI, well video quality. This network supports main stream and sub stream. The real-time image will be displayed by using sub stream.

3G-, poor video quality contrast to the above mentioned network. ▼

Step 2: Input server, account and password.

Server: WAN IP address (or domain name) plus HTTP port of the device. For example: 210.21.183:89 or 123.dvrddns.com:89.

Note: The default http port of the device is 80. If this port is modified, please use the modified port.

Account and Password: The login account and password of the device. The default account is admin and the default password is 123456.

Step 3: Click **【Login】** button to access the device.

2. Main Interface



There are many buttons in the main interface, such as, screen mode, favorite channel, snap, record, open/close audio, talk, PTZ., etc.



: Image view button. The pictures snapped in the live will be checked by clicking this button.



: Playback button. Click this button to enter into playback interface.



: Settings button. Click this button to set local configuration (Some can also support remote configuration).



: Information button. Click this button to check lots of information including local information, device information, network information, etc.



: Server list button. Click this button to add server list.



: Help button. Help you know about the use of this software quickly.



: CMS button. Make you preview the live image of multi-devices.



: Log off button. Click this button to return to the login interface.



: Screen mode button. You can choose 1, 4, 6, 8, 9, 13 or 16 screen display mode.



: Favorite channel display button. If you save your favorite channel in the favorite server list, clicking this button will directly play all favorite channels you have saved.



: Snap button. Choose the channel and click this button to capture the channel image.



: Local record button. Choose the channel and click this button to start recording.



: Open/Close audio. Choose the channel and click this button to open/close the audio of this channel.



: Open/Close talk. Click this button to pop up the servers which support talk function. Select the device to start talking.



: Set video parameter button. Select the channel and click this button to set the video parameters including brightness, hue, saturation and contrast.



: PTZ button. Click this button to pop up PTZ control panel.



: Choose bitrate priority or quality priority according to your network condition.

Channel indicator instruction:



: Video loss



: Schedule recording



: Others



: Sensor alarm




: Motion alarm

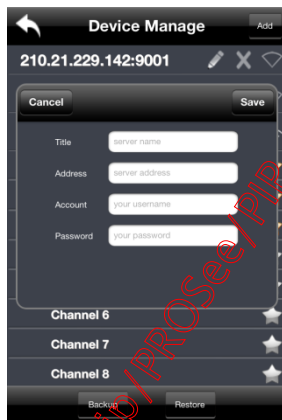
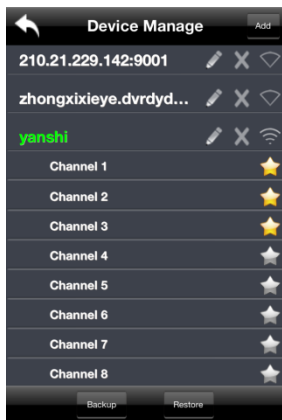


: Motion/sensor alarm based recording or manual recording

3. Server list

Click  button to pop up the following picture.

➤ Add device: Click **【Add】** button in the top right corner to pop up a dialog box as shown in the following left picture. Input the relative information of the device and click **【Save】** button.



- Delete device: Click button behind the device name to delete this device.
- Edit device: Click button behind the device name to edit the information of this device.
- Backup & restore: It is recommended to click **【Backup】** button to reserve the information of all devices. Then you can click **【Restore】** button to restore all device information after you re-install the client or delete the device uncarefully.
- indicates the device has been connected; indicates the device is connecting; indicates the device is not connected.

4. Live Preview

Once you access the device, the system will automatically display the screen mode in accordance with the channel number of the device

Note: The maximum number of channels which can be connected are nine after login.

- Click “Screen mode” button to select channel as shown in Fig 1.
- When there is video playing in a screen, you can switch the channel by long pressing the screen as shown in Fig 2.
- When no video is playing in a screen, click this screen to choose channel as shown in Fig 3.
- When the single channel is playing, you can zoom in/out the image by swiping your finger up and down as shown in Fig 4.
- When the single channel is playing, the channel can be switched by swiping your finger left or right as shown in Fig 5.
- When multi channels are playing, drag one channel screen to the other channel screen. This will make these two channels change the position of each other.

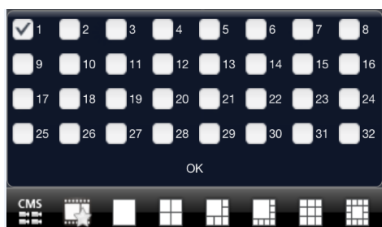


Fig 1

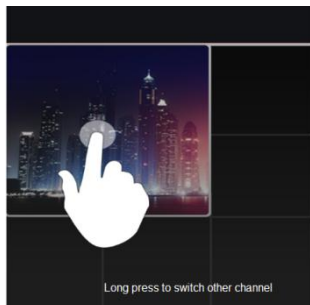


Fig 2



Fig 3

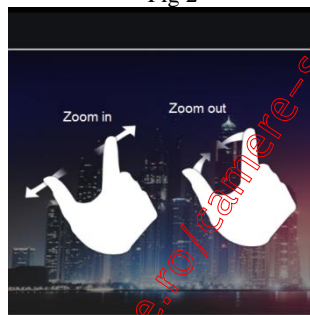


Fig 4

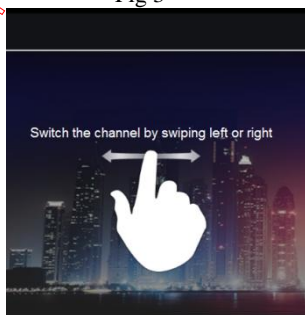




Fig 5


5. CMS Function

This function makes multi-device managements and preview come true.

Step 1: Click  to enable CMS function. When this icon turns green, it means this function is enabled.

Step 2: Click  to choose channel as shown in the right picture. After you choose the channel, click **【ok】**, the system will display the related image automatically.





- If channels have been added into the group, you can see the images by clicking the group name.
- On viewing the group channel images, click  button and select channels to check other channel images.
- Click **Exit CMS** to exit CMS mode and return to the main interface of the device.

6. Favorite Channel/Group

There are two kinds of favorite channels: favorite channels of the device and favorite group of CMS.


● Favorite channels of the device

Step 1: Click  to enter into device management list. Click the device name to extend channel. Enlighten the channels to save favorite channels as shown in the following picture on the left.

Step 2: Return to the main interface and click  button to play the favorite channels.

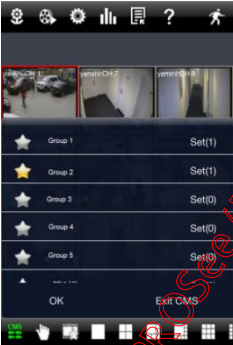
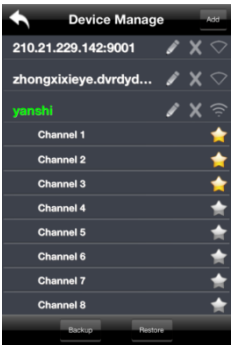
● Favorite groups of CMS

Enable CMS function and enlighten the group to save the favorite groups as shown in the following picture on the right.

Then click  button to play. Only one favorite group can be collected.



: Color means the channel or group has been collected. Grey means the channel or group isn't collected.



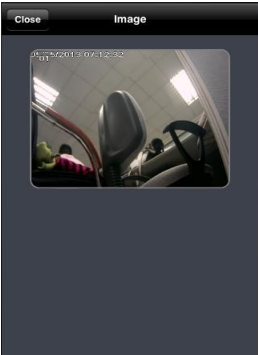
7. Playback Interface

Click “Playback” button to enter the playback interface. Then click “Search” button to search the file. To play the record by click this file name.



8. Image View

Click  button to view the captured pictures.



9. Settings Interface

In this interface, you can configure the local settings.



10. Information Interface

In this interface, you can view system information.

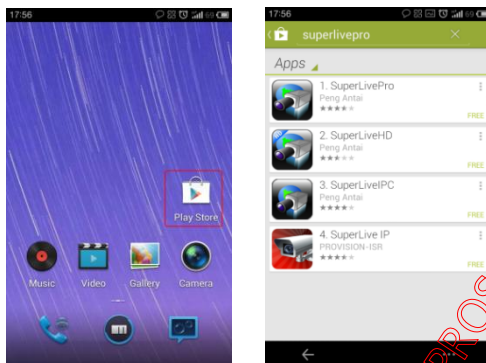


6.3 By Phones with Android OS

Software Installation

Step 1: Run "Play Store" (or Google market) program.

Step 2: Search "SuperLivePro".



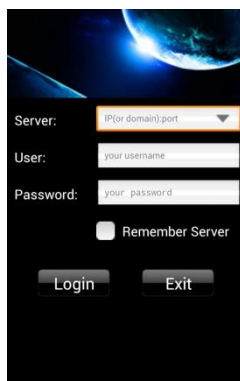
Step 3: Press “Install” button.

Step 4: Install the software subject to the notes. Once the downloading is done, the software will install automatically.



Login

Step 1: Configure the network of your device and mobile phone.

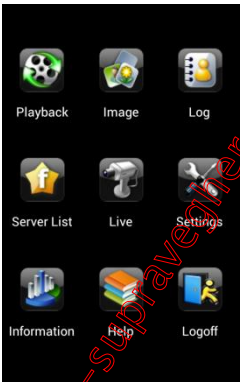


Step 2: Input the WAN IP address/domain name and port of your device in the sever column. The port should be HTTP port of your device. The default http port of the device is 80. If you have changed your http port, please enter the new port here. For example: 210.21.228.183:89 or 123.dvrdydns.com:89.

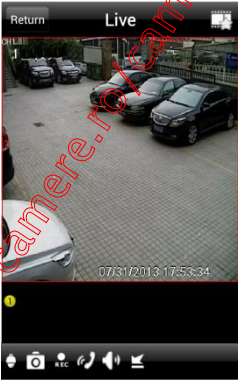
Step 3: Input the account and password of your device. The default account name is admin and the default password is 123456.

Step 4: Check “Remember Server” to save the setting. When you login next time, you can click ▼ button to select this server for quick access.

Main Menu



Live View



	PTZ
	Snap
	Record
	Talk
	Enable/disable audio
	Hide
	Playing favorite channel

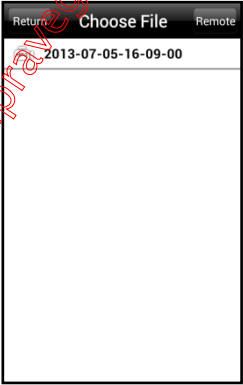
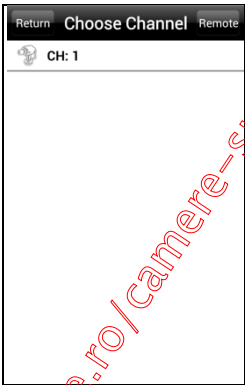
Image View



	The first picture
	The previous picture
	Next picture
	The last picture
	Zoom in
	Zoom out
	Delete

Record Playback


Click “Playback” in the main menu interface to enter playback interface. Then choose the channel you want to playback. This will take you to see the record file. Click this file to play.





	Pause/Play
	Stop
	Forward
	Backward



In the main menu interface, click “Server list” to see the above picture on the left hand.

Add Server: Click  button to pop up a window as shown in the above picture on the right hand. Enter the name, server, user and password of the device you want to add. Then click **Save** button to save the server. When you log in next time, you can choose and quickly access this server by clicking the little triangle button in the server column.

Modify Server: Click  button to modify the server information.


Delete Server: Click  button to delete the server information...

Settings

In the main menu interface, click “Settings” to enter the settings interface where you can configure local settings.

Click “Local” to enter local settings interface. In this interface, you can set favorite channel and storage .



Favorite Channel: Check the favorite channels and click **Save** button to save these channels. Then go into live interface and click  button to play these favorite channels.

Storage: Setup the relevant parameters of mobile video.

Information View

Return Information	
Device:	
Device name:	name
Device ID:	0
Software Version:	3.3.2
Build date:	20120208
System:	
Software Version:	1.5
Android Version:	4.1.1

<http://www.e-camere.ro/camere-supraveghere-ip/PROSee/PIP-7316>

7 Use method for IP-TOOL

Updating through IP-Tool

Note: Do not cut off power supply and internet when updating; If the device is unable to start because of the failure of upgrade, it needs to retrofit.

First, acquire the IP-Tool from the supplier and then double click the IP-Tool icon



to run this software. Then the device can be searched; if the device can't be searched, please check whether the PC and the device connect to the network or not.

Device name	IP Address	Subnet Mask	Gateway	Data Port	HTTP Port	MAC	Device type	Firmware version	Build	kernel
name	172.16.12.31	255.255.0.0	172.16.1.1	9008	5204	00:84:14:AC:00:20	IP Camera	1.4.7	20110107	20090609
202-beta12-test	172.16.11.156	255.255.0.0	172.16.1.1	5556	5555	00:84:14:ED:CC:69	IP Camera	2.0.0-beta12	20110421	20100813

Dev. Name:	IP:	DNS1:	Kernel Ver:
MAC Addr.:	Sub Mask:	DNS2:	Hardware Ver:
Dev. Type:	Gateway:	Http Port:	Software Ver:
Product code:	Data Port:	Build Date:	IPCamera Serial:
			Online status:

Click the device to check its detail information as shown below:

name	172.16.12.31	255.255.0.0	172.16.1.1	9008	5204	00:84:14:AC:00:20	IP Camera	1.4.7	20110107	20090609
202-beta12-test	172.16.11.156	255.255.0.0	172.16.1.1	5556	5555	00:84:14:ED:CC:69	IP Camera	2.0.0-beta12	20110421	20100813

Dev. Name:	202-beta12-test	IP:	192.168.6.6	DNS1:	190.168.0.1	Kernel Ver:	20100813
MAC Addr.:	00:84:AE:DD:69	Sub Mask:	255.255.255.0	DNS2:	0.0.0.0	Hardware Ver:	1.2
Dev. Type:	IP Camera	Gateway:	192.168.1.1	Http Port:	80	Software Ver:	2.0.0-beta14
Product code:	12	Data Port:	9008	Build Date:	20110507	IPCamera Serial:	99999
						Online status:	On

❖ Network Setup

When upgrading the software and kernel, the IP address of PC and device should be at the same network segment. If the network segment is different, user should change the IP address by right clicking the device and then select “network setup”.

Modify IP address dialog box will appear as follows:

Network setup

Local Config	Device Config
Adapter: Realtek RTL8168D(P)	<input type="checkbox"/> Automatic search network
IP Address: 192.168.13.57	<input type="radio"/> Obtain an IP address automatically
Subnet Mask: 255.255.255.0	<input checked="" type="radio"/> Use the following IP address:
Gateway: 192.168.1.1	IP Address: 192 . 168 . 226 . 201
DNS1: 210.21.196.6	Subnet: 255 . 255 . 0 . 0
DNS2: 210.53.31.2	Gateway: 192 . 168 . 226 . 1
	DNS1: 192 . 168 . 226 . 1
	DNS2: 8 . 8 . 8 . 8
	User Name: admin
	Password:

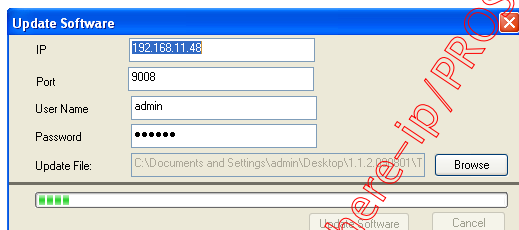
Tip: Please check if password is correct, when IP address setup fails

OK Cancel

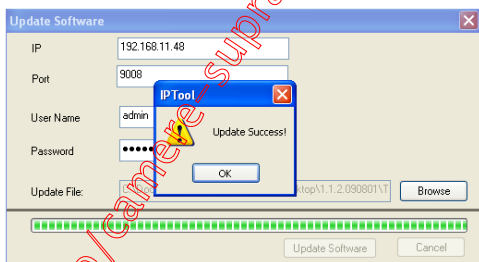
Modify IP address and click OK button to exit the dialog box, IP-Tool will display the new IP address.

❖ Upgrading Software

Select the device and right click to choose “Update software” menu. Input the username and password. Then click “browse” button to choose the upgrade software. Finally, click “Update software” to start upgrading. When upgrading, please do not disconnect PC and the device and make sure the power is on.



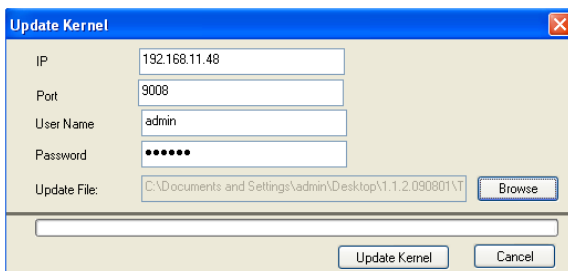
After finishing upgrading, a message box will pop up as below:



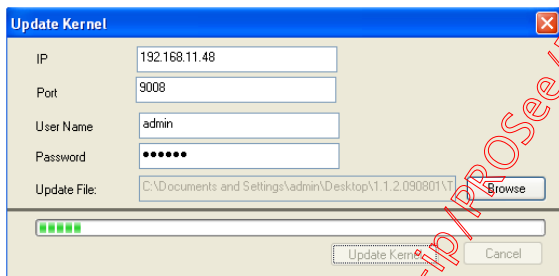
Click OK button to exit the update dialog box and then the device will restart automatically.

❖ Upgrading Kernel

Select the device and right click it to select “Update kernel” .



Enter into Kernel upgrade dialog box, input user name and password, click “Browse” to select the Update file (mboot8180-8180) and click “Update” button to start updating. When upgrading, please do not disconnect PC to device and make sure the power is on. The update progress bar will display as below:



After finishing upgrading, a message box will pop up. After a while, the device will restart automatically.

❖ **Modifying Device Name**

Right click the device you want to modify and select “Modify Device Name” from the drop-down list. This will bring up a window for changing device name. Input new device name and click “OK” button to save the setting.

8 Q & A

Q: How to find my password if I forget it?

A: Joint the default line and GND line to reset.

Default IP: 192.168.226.201

User name: admin

Password: 123456

Q: Fail to connect devices through IE browser, why?

A: Network doesn't connect well. Please check the connection and make sure it connected well.

B: IP is not available. Reset the valid IP.

C: Web port number has been revised: contact administrator to get the correct port number.

D: Exclude the above reasons. Recover default setting by jointing the default line and GND line.

Note: default IP: 192.168.226.201, mask number: 255.255.255.0

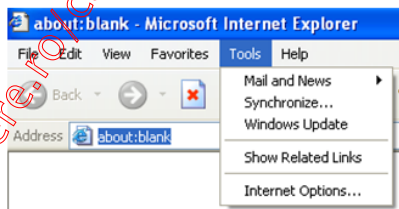
Q: IP tool cannot search devices, why?

A: It may be caused by the anti-virus software in your computer. Please exit it and try to search device again.

Q: IE cannot download ActiveX control. How can I do?

a. IE browser blocks ActiveX. Please do setup following below.

① Open IE browser. Click Tools----Internet Options....



② select Security-----Custom Level....Refer to Fig 4-1

③ Enable all the sub options under "ActiveX controls and plug-ins". Refer to Fig 4-2

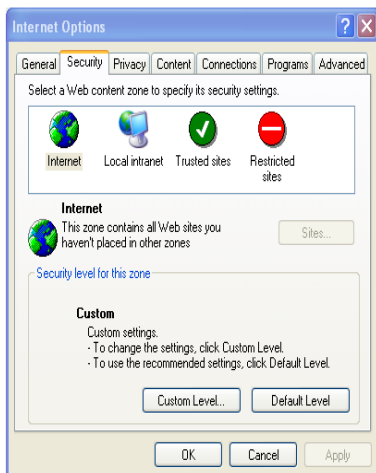


Fig 4-1

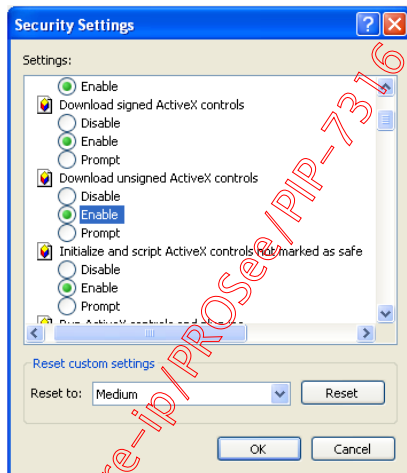


Fig 4-2

④ then click ok to finish setup.

b. Other plug-ins or anti-virus blocks ActiveX. Please uninstall or close them.

Q: No sound can be heard, why?

A: Without connect audio input device. Please connect and try again.

B: Without enable audio function at the corresponding channel. Please check AUDIO item to enable this function.

Q: Why doesn't the device connect to wireless?

A: Check the statues of wireless router. Please make sure the router is open

B: Check the router and the device port. Please make the router setup is matched with device port.

9 Specification

Model	2Mega Pixel Water-Proof IR Camera	
Video Compression	H.264	
Audio Compression	G711A	
Image Resolution	1080P, 720P, VGA, QVGA	
Shutter	1/25s~1/100000s	
Low illumination	0 Lux (LED ON)	
Lens	4mm, (options: 6mm/8mm)	3.3-12mm (varifocal lens)
WDR	Yes	
White Balance	Supports many modes, such as, auto, manual, indoor, outdoor	
Display Resolution	1920x1080(1080P); 1280x720(720P), 640x780(VGA), 320x240 (QVGA)	
Frame Rate	Max 30 fps	
Stream	1080P: 512kbps~8192kbps (adjustable)	
	720P: 256kbps~4096kbps (adjustable)	
	VGA: 128kbps~4096kbps (adjustable)	
	QVGA: 64kbps~1024kbps (adjustable)	
Audio	MIC IN*1	
Network Protocol	TCP/IP, DHCP, PPPoE, DDNS, SMTP, UPnP, RTSP, NTP	
IR Range	20~30m	
Protection Grade	IP66	
Network Port	RJ45	
Remote Surveillance	IE Browse、CMS remote control	
Client Number	Max 4	
Power Supply	DC12V/PoE	
Working Environment	-40℃ ~50℃, 10%~90% humidity	